Conference Abstracts

Treatment Outcomes of Consolidative Radiation in Extranodal Early-Stage Diffuse Large B-Cell Lymphoma

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INTRODUCTION

Diffuse large B-cell lymphoma (DLBCL) is the most common subtype of Non-Hodgkin Lymphoma, with 25-30% of patients presenting as early or limited-stage (stage I and II). We aimed to investigate whether the addition of RT provided a survival benefit in early-stage DLBCL patients based on primary site at presentation comparing nodal to EN disease.

METHODS

The National Cancer Database was utilized to identify patients diagnosed with LS-DLBCL from 2004 to 2015. Landmark analysis was performed to exclude patients with the last contact within 12 months of diagnosis. Kaplan-Meier survival analysis was used to compare overall survival (OS). Cox regression analysis was used to identify hazard ratios for survival.

RESULTS

Of the 39,745 LS patients identified, 62.9% had nodal disease, and 37.1% had EN disease. Compared to patients with

only nodal disease, patients with EN involvement were more likely to receive consolidative RT (42.9% vs. 37.2%; $p < 0.05$). EN patients were most likely to receive RT with primary bone (67.7% of 1526 patients), skin/soft tissue (60.3% of 1353), breast (58.6% of 652), testes (58.4% of 950), and thyroid (56.6% of 1059) involvement (all $p < 0.05$). With a median follow-up of 58.8 months, the addition of RT was associated with improved 5-year OS for all LS patients compared to those treated with chemotherapy alone (68 vs. 62%, $p < 0.001$). Specifically, in EN patients, the addition of RT significantly increased 5-year OS for skin/soft tissue (60% vs. 57%, $p < .001$), head and neck (63% vs. 60%, $p < 0.02$), testicular (63% vs. 45%, $p < .001$), and thyroid sites (73% vs. 67%, $p < 0.02$).

CONCLUSIONS

Though there is no consensus on optimal treatment indications for RT in LS-DLBCL, this data shows improved OS in nodal-only disease and within specific EN disease subgroups when RT is added to front-line chemotherapy.